

AMENDMENTS TO THE CLAIMS

Please amend Claims 12, 17, and 22 as follows. All pending claims have been reproduced below.

1. (Withdrawn) A receiving apparatus capable of reproducing image data and/or sound data, comprising:

reception means for receiving information consisting of image data, sound data, and additional system data;

reproducing means for reproducing received image and sound data on the basis of the system data; and

setting means for setting reproduction patterns in units of objects when the received image data has a data format segmented in units of objects.

2. (Withdrawn) The apparatus according to claim 1, further comprising a memory for storing the reproduction patterns set in units of objects in correspondence with information indicating a broadcast program contained in the system data.

3. (Withdrawn) The apparatus according to claim 2, wherein said reproducing means reproduces the received image and sound data on the basis of the reproduction pattern read out from said memory when the reproduction pattern corresponding to

information indicating a broadcast program included in the received system data is stored in said memory.

4. (Withdrawn) The apparatus according to claim 2, wherein the reproduction pattern includes at least one of a display/non-display setup of an object, movement of a display position, and a change in display size.

5. (Withdrawn) The apparatus according to claim 1, wherein the information is digital television broadcast, which broadcasts image and sound data encoded by MPEG 4.

6. (Withdrawn) A receiving method of reproducing image data and/or sound data, comprising the steps of:

receiving information consisting of image data, sound data, and additional system data;

reproducing the received image and sound data on the basis of the system data; and

setting reproduction patterns in units of objects when the received image data has a data format segmented in units of objects.

7. (Withdrawn) The method according to claim 6, further comprising the step of storing the reproduction patterns set in units of objects in a memory in correspondence with information indicating a broadcast program contained in the system data.

8. (Withdrawn) The method according to claim 7, further comprising the step of controlling reproduction of the received image and sound data in the reproduction step on the basis of the reproduction pattern read out from the memory when the reproduction pattern corresponding to information indicating a broadcast program included in the received system data is stored in the memory.

9. (Withdrawn) The method according to claim 6, wherein the reproduction pattern includes at least one of a display/non-display setup of an object, movement of a display position, and a change in display size.

10. (Withdrawn) The method according to claim 6, wherein the information is digital television broadcast, which broadcasts image and sound data encoded by MPEG 4.

11. (Withdrawn) A computer program product comprising a computer readable medium having a computer program code, for a method of receiving information, and reproducing image data and/or sound data, said product comprising:

receiving process procedure code for receiving information consisting of image data, sound data, and additional system data;

reproducing process procedure code for reproducing received image and sound data on the basis of the system data; and

setting process procedure code for setting reproduction patterns in units of objects when the received image data has a data format segmented in units of objects.

12. (Currently Amended) A receiving apparatus comprising:

a receiver, arranged to receive a bit stream, wherein the bit stream is multiplexed image data encoded by MPEG 4, and image data and/or sound data encoded by another coding format, and system data;

a first decoder, arranged to decode the image data encoded by MPEG 4;

a second decoder, arranged to decode the image data and/or sound data encoded by the other coding format;

a character generator, arranged to generate character data for display in accordance with the received system data;

a setter, arranged to set a layout of images represented by a plurality of image data, which are decoded by said first and second decoders, and the generated character data, in accordance with the coding formats of the received image and/or sound data; and

a synthesizer, arranged to synthesize the plurality of image data and/or sound data decoded by said first and second decoders and the generated character data, in accordance with the layout.

13. (Previously Presented) The apparatus according to claim 12, wherein said second decoder decodes image data and/or sound data encoded by MPEG 2.

14. (Previously Presented) The apparatus according to claim 12, further comprising a reproducer arranged to reproduce the image data and/or sound data synthesized by said synthesizer.

15. (Canceled)

16. (Previously Presented) The apparatus according to claim 12, further comprising a memory for storing the layout set by said setter in correspondence with information related to a broadcast program received by said receiver.

17. (Currently Amended) A receiving method comprising the steps of:
receiving a bit stream, wherein the bit stream is multiplexed image data encoded by MPEG 4, ~~and~~ image data and/or sound data encoded by another coding format, and system data;

decoding the image data encoded by MPEG 4;

decoding the image data and/or sound data encoded by the other coding format;

generating character data for display in accordance with the received system

data;

setting a layout of images represented by a plurality of image data, which are decoded in said decoding steps and the generated character data, in accordance with the coding formats of the received image and/or sound data; and

synthesizing the plurality of image data and/or sound data decoded in said decoding steps and the generated character data, in accordance with the layout.

18. (Previously Presented) The method according to claim 17, wherein the other coding format is MPEG 2.

19. (Previously Presented) The method according to claim 17, further comprising the step of reproducing the image data and/or sound data synthesized in said synthesizing step.

20. (Canceled)

21. (Previously Presented) The method according to claim 17, further comprising the step of storing the layout set in said setting step in a memory in

correspondence with information related to a broadcast program received in said receiving step.

22. (Currently Amended) A computer program product stored in a computer readable medium comprising a computer program code, for a receiving method, the method comprising the steps of:

receiving a bit stream, wherein the bit stream is multiplexed image data encoded by MPEG 4, and image data and/or sound data encoded by another coding format, and system data;

decoding the image data encoded by MPEG 4;

decoding the image data and/or sound data encoded by the other coding format;

generating character data for display in accordance with the received system data;

setting a layout of images represented by a plurality of image data, which are decoded in the decoding steps and the generated character data, in accordance with the coding formats of the received image and/or sound data; and

synthesizing the plurality of image data and/or sound data decoded in the decoding steps and the generated character data, in accordance with the layout.

23. (Withdrawn) A receiving apparatus comprising:

reception means for receiving a digital data sequence;

decoding means for decoding image data, sound data, and system data from the received digital data sequence;

setting means for setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence; and

control means for controlling the reproduction pattern of the decoded image data and/or sound data on the basis of the decoded system data and set reproduction pattern.

24. (Withdrawn) The apparatus according to claim 23, wherein the digital data sequence is television broadcast, which broadcasts image data and sound data encoded by MPEG 4.

25. (Withdrawn) The apparatus according to claim 23, further comprising a memory for storing the reproduction pattern corresponding to the category information in correspondence with the category information and object information indicating contents of an object that forms an image.

26. (Withdrawn) The apparatus according to claim 25, wherein said setting means reads out the reproduction pattern corresponding to the category information, and

said control means controls a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

27. (Withdrawn) The apparatus according to claim 23, further comprising:
setting means for manually setting a layout of a predetermined object; and
a memory for storing the layout set by said setting means together with the category information and object information of the predetermined object as information indicating the reproduction pattern.

28. (Withdrawn) The apparatus according to claim 27, wherein said setting means reads out the reproduction pattern corresponding to the category information, and said control means controls a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

29. (Withdrawn) A receiving method comprising the steps of:
receiving a digital data sequence;
decoding image data, sound data, and system data from the received digital data sequence;
setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence;
and

controlling the reproduction pattern of the decoded image data and/or sound data on the basis of the decoded system data and set reproduction pattern.

30. (Withdrawn) The method according to claim 29, wherein the digital data sequence is television broadcast, which broadcasts image data and sound data encoded by MPEG 4.

31. (Withdrawn) The method according to claim 29, further comprising the step of storing the reproduction pattern corresponding to the category information in a memory in correspondence with the category information and object information indicating contents of an object that forms an image.

32. (Withdrawn) The method according to claim 31, wherein the setting step includes the step of reading out the reproduction pattern corresponding to the category information, and the control step includes the step of controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

33. (Withdrawn) The method according to claim 29, further comprising:
manually setting a layout of a predetermined object; and

storing the set layout in a memory together with the category information and object information of the predetermined object as information indicating the reproduction pattern.

34. (Withdrawn) The method according to claim 33, wherein the setting step includes the step of reading out the reproduction pattern corresponding to the category information, and the control step includes the step of controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

35. (Withdrawn) A computer program product comprising a computer readable medium having a computer program code, for a receiving method, said product comprising:

receiving process procedure code for receiving a digital data sequence;

decoding process procedure code for decoding image data, sound data, and system data from the received digital data sequence;

setting process procedure code for setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence; and

controlling process procedure code for controlling the reproduction pattern of the decoded image data and/or sound data on the basis of the decoded system data and set reproduction pattern.

36. (Withdrawn) A receiving apparatus comprising:

reception means for receiving a digital data sequence which is encoded by MPEG 4 and includes image data and/or sound data encoded by another coding scheme;

first decoding means for decoding image data, sound data, and system data from the digital data sequence encoded by MPEG 4;

second decoding means for decoding the image data and/or sound data encoded by the other coding scheme;

setting means for setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence; and

control means for controlling the reproduction pattern of the image data and/or sound data decoded by said first and second decoding means on the basis of the decoded system data and set reproduction pattern.

37. (Withdrawn) The apparatus according to claim 36, wherein said second decoding means decodes image data and/or sound data encoded by MPEG 2.

38. (Withdrawn) The apparatus according to claim 36, further comprising a memory for storing the reproduction pattern corresponding to the category information in correspondence with the category information and object information indicating contents of an object that forms an image.

39. (Withdrawn) The apparatus according to claim 38, wherein said setting means reads out the reproduction pattern corresponding to the category information, and said control means controls a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern .

40. (Withdrawn) The apparatus according to claim 36, further comprising:
setting means for manually setting a layout of a predetermined object; and
a memory for storing the layout set by said setting means together with the category information and object information of the predetermined object as information indicating the reproduction pattern.

41. (Withdrawn) The apparatus according to claim 40, wherein said setting means reads out the reproduction pattern corresponding to the category information, and said control means controls a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

42. (Withdrawn) A receiving method comprising the steps of:

receiving a digital data sequence which is encoded by MPEG 4 and includes image data and/or sound data encoded by another coding scheme;

decoding image data, sound data, and system data from the digital data sequence encoded by MPEG 4;

decoding the image data and/or sound data encoded by the other coding scheme;

setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence;

and

controlling the reproduction pattern of the image data and/or sound data decoded in the first and second decoding steps on the basis of the decoded system data and set reproduction pattern.

43. (Withdrawn) The method according to claim 42, wherein the other coding scheme is MPEG 2.

44. (Withdrawn) The method according to claim 42, further comprising the step of storing the reproduction pattern corresponding to the category information in a memory in correspondence with the category information and object information indicating contents of an object that forms an image.

45. (Withdrawn) The method according to claim 44, wherein the setting step includes the step of reading out the reproduction pattern corresponding to the category information, and the control step includes the step of controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

46. (Withdrawn) The method according to claim 42, further comprising:
manually setting a layout of a predetermined object; and
storing the set layout in a memory together with the category information and object information of the predetermined object as information indicating the reproduction pattern.

47. (Withdrawn) The method according to claim 46, wherein the setting step includes the step of reading out the reproduction pattern corresponding to the category information, and the control step includes the step of controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

48. (Withdrawn) A computer program product comprising a computer readable medium having a computer program code, for a receiving method, said product comprising:

receiving process procedure code for receiving a digital data sequence which is encoded by MPEG 4 and includes image data and/or sound data encoded by another coding scheme;

first decoding process procedure code for decoding image data, sound data, and system data from the digital data sequence encoded by MPEG 4;

second decoding process procedure code for decoding the image data and/or sound data encoded by the other coding scheme;

setting process procedure code for setting a reproduction pattern corresponding to category information which is included in the system data and indicates contents of the received digital data sequence; and

controlling process procedure code for controlling the reproduction pattern of the image data and/or sound data decoded in the first and second decoding steps on the basis of the decoded system data and set reproduction pattern.

49. (Withdrawn) A receiving apparatus comprising:

reception means for receiving a digital data sequence;

decoding means for decoding image data and system data from the received digital data sequence;

obtaining means for obtaining a current time;

control means for controlling a reproduction pattern of the decoded image data on the basis of time information obtained by said obtaining means.

50. (Withdrawn) The apparatus according to claim 49, wherein the digital data sequence is television broadcast, which broadcasts image data and sound data encoded by MPEG 4.

51. (Withdrawn) The apparatus according to claim 49, wherein said control means controls the reproduction pattern of the image data in units of objects of the image data.

52. (Withdrawn) The apparatus according to claim 49, wherein said control means identifies an object to be controlled on the basis of the system data.

53. (Withdrawn) The apparatus according to claim 49, wherein said obtaining means obtains the current time from the system data.

54. (Withdrawn) The apparatus according to claim 49, further comprising a memory for holding a plurality of reproduction patterns, and wherein said control means reproduces an image based on the reproduction pattern when the reproduction pattern corresponding to the time information is held in said memory.

55. (Withdrawn) The apparatus according to claim 49, further comprising:
setting means for manually setting a layout of a predetermined object in
correspondence with the time information; and
a memory for holding the layout set by said setting means together with object
information of the predetermined object as information indicating the reproduction pattern.

56. (Withdrawn) The apparatus according to claim 55, wherein said setting
means sets at least one of a reproduction ON/OFF state, reproduction position, and
reproduction size of the predetermined object.

57. (Withdrawn) The apparatus according to claim 55, wherein said control
means reads out the reproduction pattern corresponding to the time information from said
memory, and controls a layout of an object corresponding to the object information, which
is stored in correspondence with the readout reproduction pattern.

58. (Withdrawn) The apparatus according to claim 49, wherein said
decoding means further decodes sound data from the digital data sequence, and said control
means further controls a reproduction pattern of the decoded sound data on the basis of the
system data and the time information.

59. (Withdrawn) The apparatus according to claim 58, wherein said control means controls a reproduction level and/or sound field lateralization of a sound object.

60. (Withdrawn) A receiving method comprising the steps of:
receiving a digital data sequence;
decoding image data and system data from the received digital data sequence;
obtaining a current time; and
controlling a reproduction pattern of the decoded image data on the basis of obtained time information.

61. (Withdrawn) The method according to claim 60, wherein the digital data sequence is television broadcast, which broadcasts image data and sound data encoded by MPEG 4.

62. (Withdrawn) The method according to claim 60, wherein the control step includes the step of controlling the reproduction pattern of the image data in units of objects of the image data.

63. (Withdrawn) The method according to claim 60, wherein the control step includes the step of identifying an object to be controlled on the basis of the system data.

64. (Withdrawn) The method according to claim 60, wherein the obtaining step includes the step of obtaining the current time from the system data.

65. (Withdrawn) The method according to claim 60, further comprising the steps of:

holding a plurality of reproduction patterns in a memory; and

reproducing an image based on the reproduction pattern when the reproduction pattern corresponding to the time information is held in the memory.

66. (Withdrawn) The method according to claim 60, further comprising:

manually setting a layout of a predetermined object in correspondence with the time information; and

holding the set layout in a memory together with object information of the predetermined object as information indicating the reproduction pattern.

67. (Withdrawn) The method according to claim 66, wherein the setting step includes the step of setting at least one of a reproduction ON/OFF state, reproduction position, and reproduction size of the predetermined object.

68. (Withdrawn) The method according to claim 66, wherein the control step includes the step of reading out the reproduction pattern corresponding to the time

information from the memory, and controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

69. (Withdrawn) The method according to claim 60, wherein the decoding step includes the step of further decoding sound data from the digital data sequence, and the control step further includes the step of controlling a reproduction pattern of the decoded sound data on the basis of the system data and the time information.

70. (Withdrawn) The method according to claim 69, wherein the control step includes the step of controlling a reproduction level and/or sound field lateralization of a sound object.

71. (Withdrawn) A computer program product comprising a computer readable medium having a computer program code, for a receiving method, said product comprising:

receiving process procedure code for receiving a digital data sequence;

decoding process procedure code for decoding image data and system data from the received digital data sequence;

obtaining process procedure code for obtaining a current time; and

controlling process procedure code for controlling a reproduction pattern of the decoded image data on the basis of obtained time information.

72. (Withdrawn) A receiving apparatus comprising:

reception means for receiving a digital data sequence which is encoded by a first scheme and includes image data encoded by a second scheme;

first decoding means for decoding image data and system data from the digital data sequence encoded by the first scheme;

second decoding means for decoding the image data encoded by the second scheme;

obtaining means for obtaining a current time; and

control means for controlling a reproduction pattern of the image data decoded by said first and second decoding means on the basis of the decoded system data, and time information obtained by said obtaining means.

73. (Withdrawn) The apparatus according to claim 72, wherein the first scheme is MPEG 4, and the second scheme is MPEG 2.

74. (Withdrawn) The apparatus according to claim 72, wherein the first scheme is MPEG 2, and the second scheme is MPEG 4.

75. (Withdrawn) The apparatus according to claim 72, wherein said control means controls the reproduction pattern of the image data in units of objects of the image data.

76. (Withdrawn) The apparatus according to claim 72, wherein said control means identifies an object to be controlled on the basis of the system data.

77. (Withdrawn) The apparatus according to claim 72, wherein said obtaining means obtains the current time from the system data.

78. (Withdrawn) The apparatus according to claim 72, further comprising a memory for holding a plurality of reproduction patterns, and wherein said control means reproduces an image based on the reproduction pattern when the reproduction pattern corresponding to the time information is held in said memory.

79. (Withdrawn) The apparatus according to claim 72, further comprising:
setting means for manually setting a layout of a predetermined object in
correspondence with the time information; and
a memory for holding the layout set by said setting means together with object
information of the predetermined object as information indicating the reproduction pattern.

80. (Withdrawn) The apparatus according to claim 79, wherein said setting means sets at least one of a reproduction ON/OFF state, reproduction position, and reproduction size of the predetermined object.

81. (Withdrawn) The apparatus according to claim 79, wherein said control means reads out the reproduction pattern corresponding to the time information from said memory, and controls a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

82. (Withdrawn) The apparatus according to claim 72, wherein said first and second decoding means further decode sound data from the digital data sequence, and said control means further controls a reproduction pattern of the decoded sound data on the basis of the system data and the time information.

83. (Withdrawn) The apparatus according to claim 82, wherein said control means controls a reproduction level and/or sound field lateralization of a sound object.

84. (Withdrawn) A receiving method comprising the steps of:
receiving a digital data sequence which is encoded by a first scheme and includes image data encoded by a second scheme;

decoding image data and system data from the digital data sequence encoded by the first scheme;

decoding the image data encoded by the second scheme;

obtaining a current time; and

controlling a reproduction pattern of the image data decoded in the first and second decoding steps on the basis of the decoded system data and the obtained time information.

85. (Withdrawn) The method according to claim 84, wherein the first scheme is MPEG 4, and the second scheme is MPEG 2.

86. (Withdrawn) The method according to claim 84, wherein the first scheme is MPEG 2, and the second scheme is MPEG 4.

87. (Withdrawn) The method according to claim 84, wherein the control step includes the step of controlling the reproduction pattern of the image data in units of objects of the image data.

88. (Withdrawn) The method according to claim 84, wherein the control step includes the step of identifying an object to be controlled on the basis of the system data.

89. (Withdrawn) The method according to claim 84, wherein the obtaining step includes the step of obtaining the current time from the system data.

90. (Withdrawn) The method according to claim 84, further comprising the steps of:

holding a plurality of reproduction patterns in a memory; and

reproducing an image based on the reproduction pattern when the reproduction pattern corresponding to the time information is held in the memory.

91. (Withdrawn) The method according to claim 84, further comprising:

manually setting a layout of a predetermined object in correspondence with the time information; and

holding the set layout in a memory together with object information of the predetermined object as information indicating the reproduction pattern.

92. (Withdrawn) The method according to claim 91, wherein the setting step includes the step of setting at least one of a reproduction ON/OFF state, reproduction position, and reproduction size of the predetermined object.

93. (Withdrawn) The method according to claim 91, wherein the control step includes the step of reading out the reproduction pattern corresponding to the time

information from the memory, and controlling a layout of an object corresponding to the object information, which is stored in correspondence with the readout reproduction pattern.

94. (Withdrawn) The method according to claim 84, wherein the decoding step includes the step of further decoding sound data from the digital data sequence, and the control step includes the step of controlling a reproduction pattern of the decoded sound data on the basis of the system data and the time information.

95. (Withdrawn) The method according to claim 94, wherein the control step includes the step of controlling a reproduction level and/or sound field lateralization of a sound object.

96. (Withdrawn) A computer program product comprising a computer readable medium having a computer program code, for a receiving method, said product comprising:

receiving process procedure code for receiving a digital data sequence which is encoded by a first scheme and includes image data encoded by a second scheme;

first decoding process procedure code for decoding image data and system data from the digital data sequence encoded by the first scheme;

second decoding process procedure code for decoding the image data encoded by the second scheme;

obtaining process procedure code for obtaining a current time; and

controlling process procedure code for controlling a reproduction pattern of the image data decoded in the first and second decoding steps on the basis of the decoded system data and the obtained time information.